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FURTHER ON THE PERIOD OF NY CEPHEI

NY Cephei (HD 217312) was found by Heard and Fernie (1968) to be a double-lined spectroscopic binary with a period of $15^{\text{d}}.2767 \pm 0^{\text{d}}.0010$. Rao (1972) and Madore and Percy (1973) independently observed light variations which strongly suggested that this system was also an eclipsing variable. This was confirmed later in 1973 when Scarfe and Barlow (1974) followed the star through primary eclipse and calculated a time of minimum at JD(Hel.) 2441903.8136 ± 0.0007 , earlier than predicted on the basis of the minima observed by both Rao and Madore and Percy together with the period of Heard and Fernie. However it was felt premature to adjust the period at that time.

The period was revised to $15^{\text{d}}.27575 \pm 0^{\text{d}}.00010$ by Mayer et al. (1978) whose observations covered the egress from primary eclipse. Recently a revised period of $15^{\text{d}}.2756 \pm 0^{\text{d}}.0001$, based upon a time of minimum obtained in 1975, was given by Scarfe (1979) as part of a progress report on NY Cephei. The revised periods do not differ significantly either from each other or from the spectroscopic value, but both reduce the latter's uncertainty by an order of magnitude.

We have observed another primary eclipse of NY Cephei at the University of Victoria Observatory on the night of 1980

October 2-3 under fairly good sky conditions. The observations give a time of minimum light at JD(Hel.) 2444515.9630 ± 0.0008 by the method of Kwee and van Woerden (1956), about 30 min. later than predicted by the ephemeris of Scarfe. Combining this result with the 1973 time of minimum yields another slightly revised period of $15^{\text{d}}.275727 \pm 0^{\text{d}}.000006$, but further reduces the uncertainty by another order of magnitude. A plot of all V observations within $0^{\text{d}}.25$ of primary eclipse obtained at this Observatory and those of Mayer et al., according to the ephemeris

Time of Pri. Min. = JD(Hel.) $2441903.8136 + 15.275727E$,
show all the data to be consistent with this period.

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